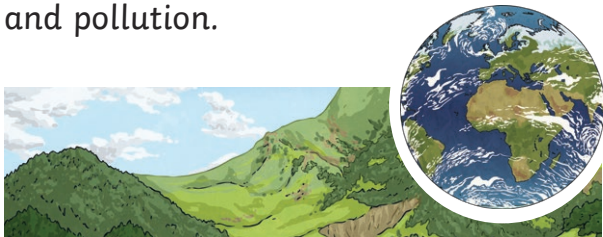


# Earth Day 2021: Restore Our Earth

## What Is Earth Day?

Earth Day is held on 22<sup>nd</sup> April. Each year, people across the world take part in activities to help protect our precious planet.

The theme for the 2021 Earth Day is 'Restore Our Earth'. This theme focuses on healing our planet rather than accepting the changes that have happened as a result of human actions, like global warming, **deforestation** and pollution.



## Why Do We Need to Restore Our Earth?

### Global Warming

Humans have made a huge difference to the planet, particularly in the last century. Most industry, electricity and transport is powered by burning **fossil fuels**. This releases large amounts of CO<sub>2</sub> (carbon dioxide) gas into the Earth's atmosphere. This has helped to cause an unnatural climate change, known as global warming. Global warming

has caused glaciers to melt, sea levels to rise and more unpredictable and extreme weather events.



## Did You Know...?

The Earth's surface temperature has risen 1.2°C since the year 1880.



### Deforestation

Around 30% of the Earth is covered in forests. Trees produce valuable oxygen and help absorb CO<sub>2</sub> from the atmosphere. However, much of the world's forests are being cut down for farming land or timber.

Most land-based animals, including elephants and rhinos, live in forests. Deforestation destroys these animals' homes and is causing many of them to become **endangered**.



## Did You Know...?

In 2019, an area of forest approximately the size of a football field was cut down every minute.



## Plastic Pollution

Plastic is used for many products and objects and there are currently around 9 billion tons of plastic on Earth. Plastic takes around 500 years to **decompose** so large amounts of unwanted plastic ends up polluting our oceans. Much of it is broken down into small particles, called microplastics which can be swallowed by animals.



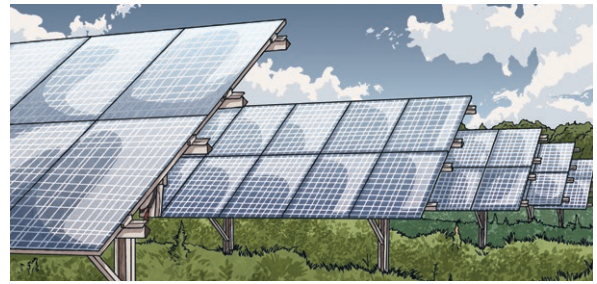
## How Can We Restore Our Earth?

Many changes and plans have been put in place to try and tackle some of the issues affecting the planet.

## Renewable Energy

Lots of countries are now using renewable 'green' energy which uses the Earth's natural energy (like sunlight, wind or water).

Many people now drive electric and hybrid cars which release less CO<sub>2</sub> and are better for the environment. Furthermore, the UK has announced that it will end all sales of new diesel and petrol cars in 2030.



## Did You Know...?

Around 190 countries have signed a contract called The Paris Agreement. This is a promise to keep global warming below 2°C.



## Tree Planting

Tree-planting projects aim to regrow trees, especially in areas where forests have been cut down. These trees help to absorb CO<sub>2</sub> and create new habitats for animals.



## The 'War on Plastic'

Many people have been working hard to recycle and reduce the plastic that they use. In the UK, paper straws are being offered in bars and restaurants instead of plastic ones and plastic bags are no longer free of charge.

## Glossary

**decompose:** To rot away.

**deforestation:** The act of clearing large areas of trees.

**endangered:** At risk of becoming extinct.

**fossil fuels:** Fuels such as coal or gas.

# Questions

1. How much of the earth is covered in forests? Tick one.

- 20%
- 50%
- 30%
- 40%

2. Which term describes small particles of plastic? Tick one.

- microcarbons
- miniplastics
- microparticles
- microplastics

3. What is the name of the contract which around 190 countries have signed?

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4. Look at the section called **Global Warming**.

Find and copy one word which shows that weather events can be unexpected.

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5. How long does plastic take to decompose?

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6. ... **plastic bags are no longer free of charge**.

How might this help with the 'war on plastic'?

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7. Explain why you think the word 'green' is used to describe renewable energy.

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8. Summarise what you have learnt about global warming.

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# Answers

1. How much of the earth is covered in forests? Tick one.
  - 20%
  - 50%
  - 30%**
  - 40%
2. Which term describes small particles of plastic? Tick one.
  - microcarbons
  - miniplastics
  - microparticles
  - microplastics**
3. What is the name of the contract which around 190 countries have signed?  
**Around 190 countries have signed a contract called The Paris Agreement.**
4. Look at the section called **Global Warming**.  
Find and copy one word which shows that weather events can be unexpected.  
**unpredictable**
5. How long does plastic take to decompose?  
**Plastic takes around 500 years to decompose.**
6. ... **plastic bags are no longer free of charge.**  
How might this help with the 'war on plastic'?  
**Pupils' own responses, such as: I think that people will re-use other bags rather than buy new plastic bags if they have to pay for them. This should mean that fewer plastic bags are made and used. This helps the war on plastic.**
7. Explain why you think the word 'green' is used to describe renewable energy.  
**Pupils' own responses, such as: I think the word green is used because it is a colour we associate with nature (e.g. plants and trees) and green energy is a natural energy that is better for the environment.**

8. Summarise what you have learnt about global warming.

**Pupils' own responses, such as: I have learnt that global warming is an unnatural climate change which has been affected by the burning of fossil fuels. It is causing changes to the sea levels, glaciers and weather and many countries have signed the Paris Agreement to help reduce global warming.**



# Earth Day 2021: Restore Our Earth

## What Is Earth Day?

Earth Day, held annually on 22<sup>nd</sup> April, is a day of environmental action to help protect our precious planet. It began in the US in 1970 but has since become a global event involving over 190 countries.



## Earth Day 2021

The theme for the 2021 Earth Day is 'Restore Our Earth'. This theme raises awareness of the natural ways that we can restore the Earth's damaged **ecosystems**. It suggests that, if we work together, we can help to heal our Earth. We do not have to learn to live with and work around the effects of human changes, such as global warming, deforestation and pollution.

## Why Do We Need to Restore Our Earth?

### Global Warming

Humans have had a huge impact on the planet, particularly over the last century. Much of the world's industry, electricity and transport is now powered by the burning of fossil fuels. This process

releases large amounts of CO<sub>2</sub> (carbon dioxide) into the Earth's atmosphere which have contributed to an unnatural climate change; the Earth's surface temperature has risen 1.2°C since the time of the **Industrial Revolution**.

Global warming has already had many noticeable effects on the environment: glaciers have melted, sea levels are rising and parts of the world are experiencing more unpredictable and extreme weather events.



## Deforestation

Around 30% of the Earth is covered in forests. Trees produce valuable oxygen and help absorb CO<sub>2</sub> from the atmosphere. However, much of the world's forests are being cut down for farming land or timber. In 2019, an area of forest approximately the size of a football field was cut down every minute.





Forests also provide a habitat for most land-based animals, including elephants and rhinos. Deforestation is destroying the habitats of many animals and causing a large number of them to become **endangered**.

## Plastic Pollution

Many of the world's objects are made of plastic with most of these being used only once. As a result, there are currently around 9 billion tons of plastic on Earth — much of which is no longer needed. Plastic takes around 500 years to decompose and a lot ends up as **microplastics** which can be easily swallowed by marine animals.

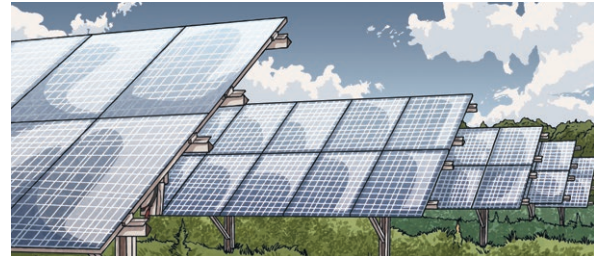


## How Can We Restore Our Earth?

Many people are aiming to address some of the issues affecting the planet. In 2015, around 190 countries signed The Paris Agreement. This is a commitment to limit global warming to below 2°C (and ideally 1.5°C) by producing less CO<sub>2</sub> and other 'greenhouse gases'.

## Renewable Energy

Many nations use renewable 'green' energy (such as sunlight, wind and water) rather than fossil fuels. These harness the Earth's natural power and help reduce the effects of global warming. Electric and hybrid cars — which produce lower/zero CO<sub>2</sub> — are now being widely manufactured and, from 2030, the UK will end all sales of new diesel and petrol cars.



## Reforestation

Schemes and organisations have been planting trees where forests have previously been cut down. These plants, once fully-grown, will help to absorb carbon dioxide (often used as part of **carbon offsetting**) and restore habitats for many animals.



## The 'War on Plastic'

There has been a large effort to try to reduce the amount of plastic we consume and to try to recycle where we can. For example, paper straws (rather than plastic) are being offered in bars and restaurants and, since 2015, single-use plastic bags have carried a charge of 5p in the UK.

## Glossary

**carbon offsetting:** Balancing CO<sub>2</sub> by planting trees to absorb the CO<sub>2</sub> produced by other activities.

**ecosystems:** The living and non-living things in certain areas.

**endangered:** At risk of becoming extinct.

**Industrial Revolution:** The rapid development of industry in the 18<sup>th</sup> and 19<sup>th</sup> centuries.

**microplastics:** Particles of plastic smaller than 5mm.



# Questions

1. Which of the following is not caused by human activity? Tick one.

- global warming  
 volcanoes  
 deforestation  
 pollution

2. Draw **four** lines to match each year with the corresponding statement.

2030	•	An area of forest the size of a football field was cut down each minute.
2019	•	Around 190 countries signed the Paris Agreement.
1970	•	Earth Day began in the US.
2015	•	Sales of new petrol and diesel cars will end in the UK.

3. Look at the section called **Global Warming**.

Find and copy one word which shows that climate change on Earth is not following the course of nature.

\_\_\_\_\_

4. Fill in the missing words.

Trees produce valuable \_\_\_\_\_ and help absorb \_\_\_\_\_ from the atmosphere.

5. How much plastic is currently on Earth?

\_\_\_\_\_

6. Explain how the process of reforestation helps with carbon offsetting.

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7. **Electric and hybrid cars — which produce lower/zero CO<sub>2</sub> — are now being widely manufactured.**

Explain what the term 'widely manufactured' means.

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8. Discuss why you think nations may have chosen to sign The Paris Agreement.

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9. Summarise why it is important to restore our Earth in 30 words or fewer.

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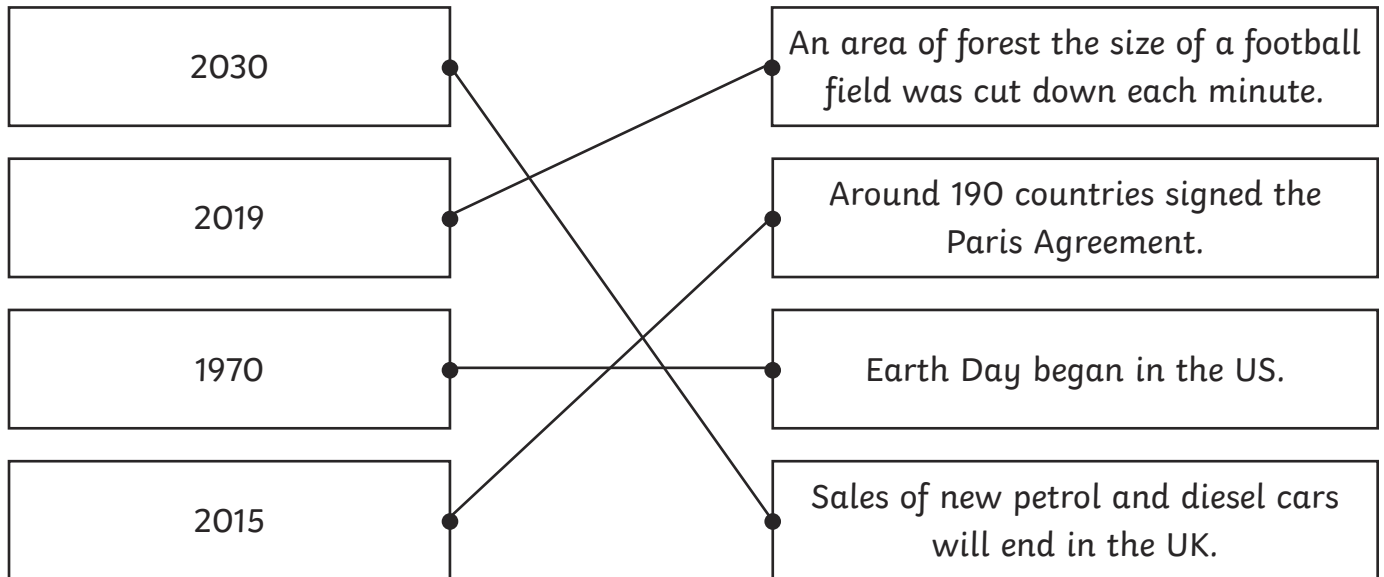
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# Answers

1. Which of the following is not caused by human activity? Tick one.

- global warming
- volcanoes**
- deforestation
- pollution

2. Draw **four** lines to match each year with the corresponding statement.



3. Look at the section called **Global Warming**.

Find and copy one word which shows that climate change on Earth is not following the course of nature.

**unnatural**

4. Fill in the missing words.

Trees produce valuable **oxygen** and help absorb **CO<sub>2</sub>/carbon dioxide** from the atmosphere.

5. How much plastic is currently on Earth?

**There are currently around 9 billion tons of plastic on Earth.**

6. Explain how the process of reforestation helps with carbon offsetting.

**Pupils' own responses, such as: Reforestation helps with carbon offsetting because the extra trees that are planted absorb some of the carbon dioxide produced by human activities which creates a better balance for the environment.**



7. **Electric and hybrid cars — which produce lower/zero CO<sub>2</sub> — are now being widely manufactured.**

Explain what the term 'widely manufactured' means.

**Pupils' own responses, such as: Widely manufactured means produced on a large scale.**

8. Discuss why you think nations may have chosen to sign The Paris Agreement.

**Pupils' own responses, such as: I think nations may have chosen to sign The Paris Agreement because they would like to protect the planet for future generations and are concerned about the effects of global warming on their own communities and the wider world.**

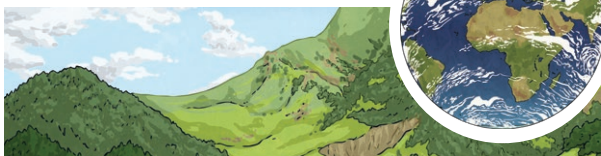
9. Summarise why it is important to restore our Earth in 30 words or fewer.

**Pupils' own responses, such as: It is important to restore our Earth because our planet is precious and we need to take action to address global warming, deforestation and pollution before it is too late.**

# Earth Day 2021: Restore Our Earth

## What Is Earth Day?

Earth Day, held annually on 22<sup>nd</sup> April, is a day of environmental action. It originated in the US in 1970 but has since become a global event engaging over 190 countries and 1 billion participants throughout the world in activities to protect our precious planet.



## Earth Day 2021

The theme for the 2021 Earth Day is 'Restore Our Earth'. This theme raises awareness of the natural ways in which we can help to restore the Earth's damaged ecosystems. By focusing on restorative solutions, such as emerging green technologies, people can work towards rebuilding and repairing the Earth rather than trying to adjust to the changes that have occurred as a result of phenomena such as global warming.

## Why Do We Need to Restore Our Earth?

### Global Warming

Humanity has had a huge impact on the planet, particularly over the last

century. Much of the world is powered by the burning of fossil fuels: a process which releases large amounts of CO<sub>2</sub> (carbon dioxide) into the Earth's atmosphere. Greenhouse gases (which include CO<sub>2</sub>) are naturally occurring and essential to the survival of the planet. However, many human activities (such as industry, transport, large-scale agriculture and power) have caused a sharp rise in greenhouse gases and an unnatural climate change. There has been a recorded rise in global surface temperatures of 1.2°C since the Industrial Revolution of the 19<sup>th</sup> century.

Global warming has already had many noticeable effects on the environment: glaciers have diminished, sea levels are rising and parts of the world are experiencing more unpredictable and extreme weather events.



### Deforestation

Around 30% of the Earth is covered in forest. Trees produce valuable oxygen and help absorb CO<sub>2</sub> from the atmosphere. However, much of the world's forest is being cleared for timber or agricultural land. In 2019, an area approximately the size of a football field was lost every minute to deforestation.

Forests also provide a habitat for up to 80% of the world's land-based animals, including elephants and rhinos. Deforestation is having a devastating impact on the habitats of many animals and causing a large number of them to become endangered.



## Plastic Pollution

Plastic has been mass-manufactured since the 1950s. Nowadays, most of the objects and items we use in our daily lives are made of plastic. However, most plastic products are only used once and there are around 9 billion tons of plastic on Earth — much of which is no longer needed. Plastic takes around 500 years to decompose and a lot ends up in the world's oceans. Microplastics (minuscule pieces of plastic smaller than 5mm) are easily ingested by humans and have been found in the stomachs of almost all marine species.



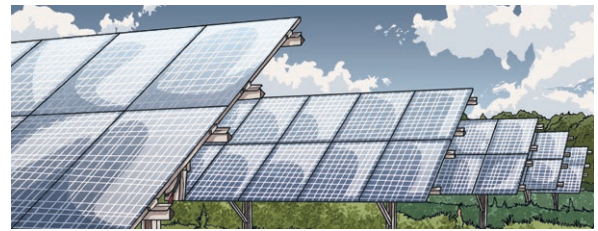
## How Can We Restore Our Earth?

There are many initiatives and commitments which aim to address some of the issues affecting the planet. For example, in 2015, around 190 countries signed The Paris Agreement:

a legally-binding pledge to reduce global warming to below 1.5°C and ideally 2°C by reducing greenhouse gas emissions.

## Renewable Energy

Many nations, such as Iceland and Norway, have made commitments to move towards renewable 'green' energy (such as wind, solar and water power). These harness the Earth's natural power and help reduce the effects of global warming. Electric and hybrid cars — which have low/zero emissions — are now being widely manufactured and, from 2030, the UK will end all sales of new diesel and petrol cars.



## Reforestation

Organisations and schemes have been replanting trees, especially where forests have depleted. These plants, once established, will help to absorb carbon dioxide and reinstate habitats for many species. Many schemes plant trees to offset carbon emissions (an equivalent number of trees is planted to balance out the carbon produced by another human activity).





## Re-use and Recycle

People have begun, what is commonly called, a 'war on plastic'; there has been a concerted effort to try to reduce the amount of plastic we consume and recycle. For example, most hospitality venues now offer paper (rather than plastic) straws with drinks. Since 2015, single-use plastic bags have carried a charge of 5p in the UK in an attempt to encourage people to re-use bags and consider non-plastic alternatives.



# Questions

1. The theme for the 2021 Earth Day is 'Restore Our Earth'.

Which word means the same as 'restore'? Tick one.

- help
- love
- repair
- replant

2. Draw **four** lines to match each amount with its corresponding fact.

30%

around 190

80%

500

The amount of land-based animals that live in forests.

The amount of Earth that is covered in forests.

The number of years that it takes for plastic to decompose.

The number of countries that have signed the Paris agreement.

3. Find and copy a phrase from the text which shows that there has been a rapid increase in greenhouse gas emissions.

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4. In which section of the text would you find information about the future of petrol and diesel cars in the UK?

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5. What size are microplastics?

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6. Explain why you think that plastic has been mass-manufactured since the 1950s.

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7. **In 2015, around 190 countries signed the The Paris Agreement: a legally-binding pledge to reduce global warming...**

Explain what is meant by the term 'legally-binding pledge'.

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8. Discuss why you think people use the term 'war on plastic'.

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9. Look at the section called **How Can We Restore Our Earth?**

Which of the initiatives and commitments do you think is the most valuable? Explain your answer.

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10. Summarise why it is important to restore our Earth in 25 words or fewer.

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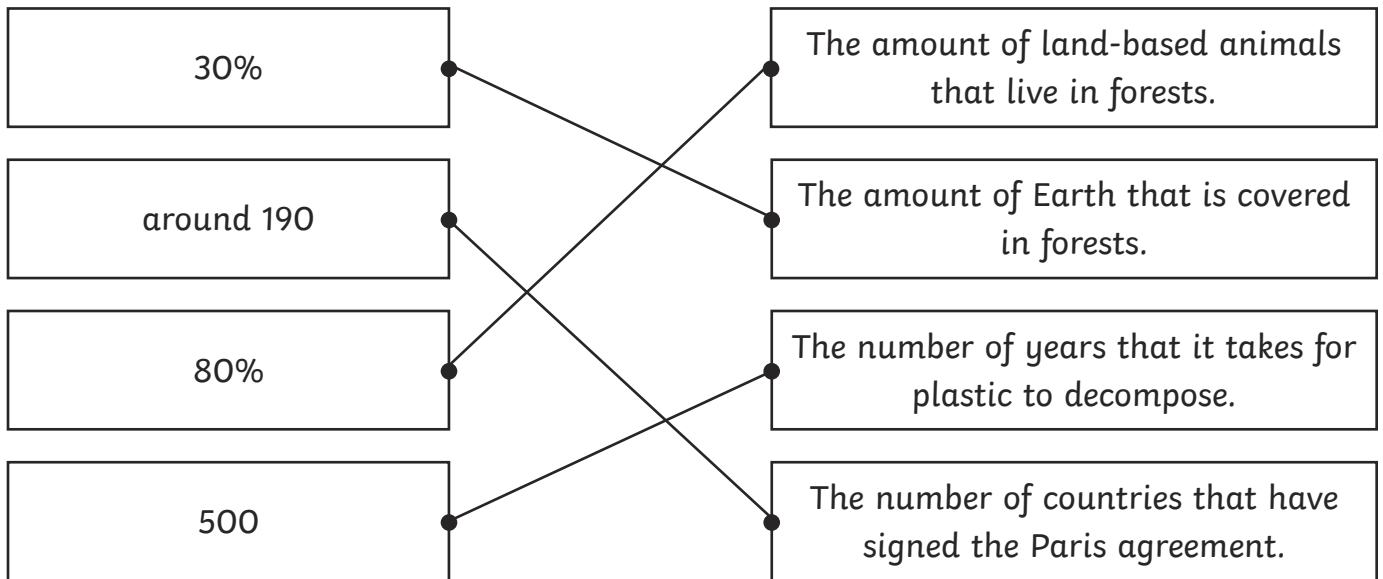
# Answers

1. The theme for the 2021 Earth Day is 'Restore Our Earth'.

Which word means the same as 'restore'? Tick one.

- help
- love
- repair**
- replant

2. Draw four lines to match each amount with its corresponding fact.



3. Find and copy a phrase from the text which shows that there has been a rapid increase in greenhouse gas emissions.

**sharp rise**

4. In which section of the text would you find information about the future of petrol and diesel cars in the UK?

**Renewable Energy**

5. What size are microplastics?

**Microplastics are minuscule pieces of plastic smaller than 5mm.**

6. Explain why you think that plastic has been mass-manufactured since the 1950s.

**Pupils' own responses, such as: Plastic has probably been mass-manufactured since the 1950s because that's when companies were able to make plastic easily. It can be used in many objects and is probably cheap to make.**

7. **In 2015, around 190 countries signed the The Paris Agreement: a legally-binding pledge to reduce global warming...**

Explain what is meant by the term 'legally-binding pledge'.

**Pupils' own responses, such as: Legally-binding pledge means a promise that cannot be broken because it would be against the law to do so.**

8. Discuss why you think people use the term 'war on plastic'.

**Pupils' own responses, such as: The term 'war on plastic' is used because plastic waste has become such a huge problem that the aggressive efforts of lots of people are needed to tackle it — like in some real war situations.**

9. Look at the section called **How Can We Restore Our Earth?**

Which of the initiatives and commitments do you think is the most valuable? Explain your answer.

**Pupils' own responses, such as: I think that The Paris Agreement is the most valuable because countries need to work together to tackle global warming. By promising to reduce emissions, there should hopefully be the chance to help restore the Earth.**

10. Summarise why it is important to restore our Earth in 25 words or fewer.

**Pupils' own responses, such as: We need to restore our Earth before it's too late so we can protect it for future generations and help save many species from extinction.**